

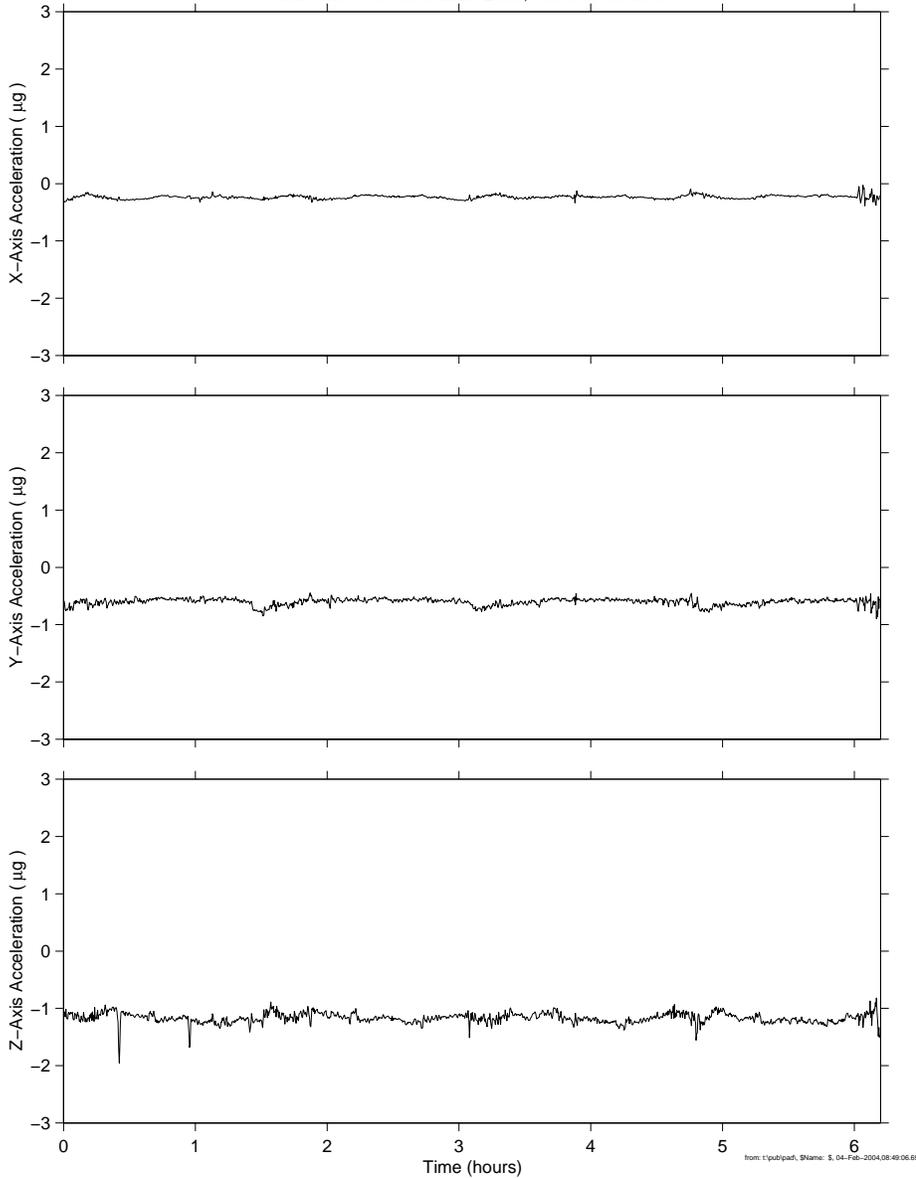
+XVV/+ZLV Torque Equilibrium Attitude (TEA)

mams, ossbmf at LAB1O2, ER1, Lockers 3,4;[135.28 -10.68 132.12]
0.0625 sa/sec (0.01 Hz)

Increment: 8, Flight: 7S
SSAnalysis[0.0 0.0 0.0]

+XVV/+ZLV Torque Equilibrium Attitude

Start GMT 05–November–2003, 309/01:00:03.363



Description

Sensor	MAMS,ossbmf 0.0625 sa/sec (0.01 Hz)
Location	LAB1O2, ER1, Lockers 3,4
Orientation	Space Station Analysis (SSA)
Inc/Flight	Increment: 8, Flight: 7S
Plot Type	Time Series

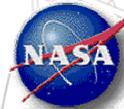
NOTES:

- TEA is an “airplane like” attitude maintained relative to the Local Vertical Local Horizontal (LVLH), a rotating coordinate system.
- In TEA, the gravity gradient and rotational components tend to cancel out, resulting in the near-zero X-axis component.
- +XVV / +ZLV indicates that the ISS positive X-axis is toward the velocity vector, the Z-axis is towards nadir.
- The time period covered in these plots is during crew sleep period (s). See Crew Active, Crew Asleep for comparison
- The means and RMS values per axis are tabulated below.

Axis	Mean (μg)	RMS (μg)
X	-0.24	0.24
Y	-0.60	0.60
Z	-1.17	1.17



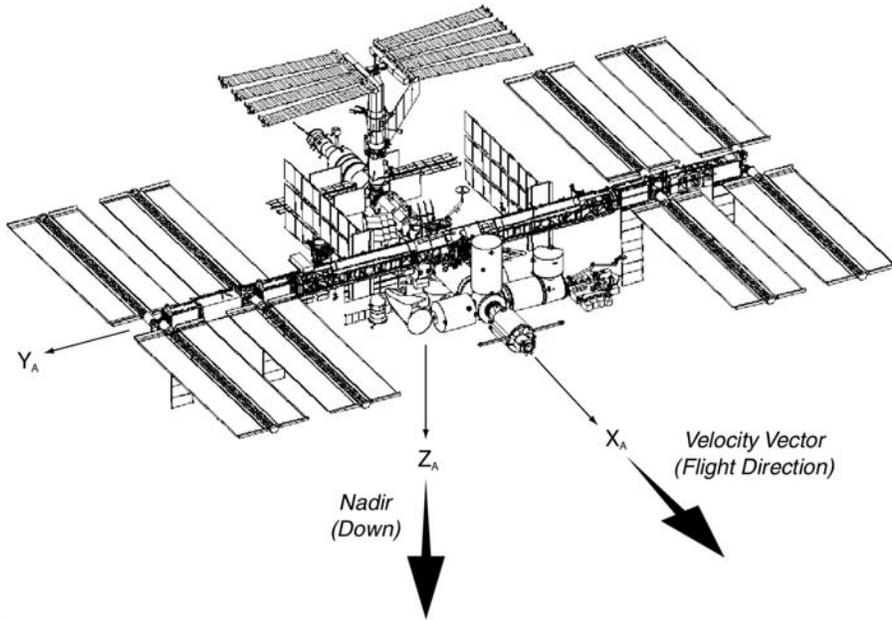
Microgravity Science Division



Glenn Research Center

Regime:	Quasi-steady
Category:	Vehicle
Source:	Attitude, TEA

+XVV/+ZLV Torque Equilibrium Attitude (TEA)

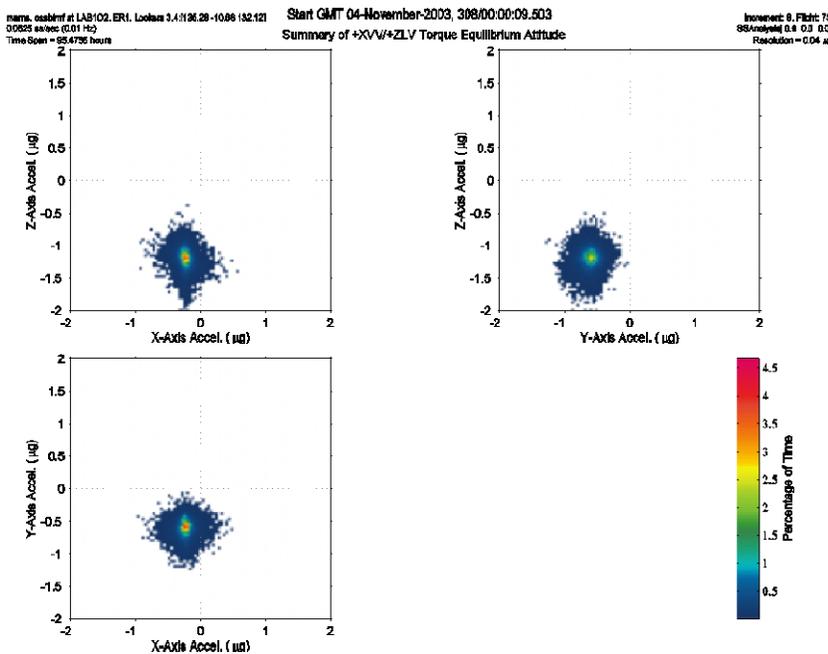


Description	
Sensor	MAMS, ossbtmf 0.0625 sa/sec (0.01 Hz)
Location	LAB102, ER1, Lockers 3,4
Orientation	Space Station Analysis (SSA)
Inc/Flight	Increment: 8, Flight: 7S
Plot Type	Quasi-steady Three Dimensional Histogram

NOTES:

- Actual orientation dependent on ISS configuration. For time span of plot during Increment 8, attitude was nominally [yaw pitch roll] = [350.0 350.6 0]
- The time period covered in these plots is during crew sleep period (s). See Crew Active, Crew Asleep for comparison
- For the time period shown, the centroid is calculated as an estimate of the means for each axis. The results are tabulated below.

Axis	Centroid (μg)
X	-0.21
Y	-0.60
Z	-1.17
Magnitude	1.34



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Regime:	Quasi-steady
Category:	Vehicle
Source:	Attitude, TEA